

service required. The advance accounts having been allowed to run up during the incumbency of one Range Forest Officer, it was found difficult for another to collect his predecessor's outstanding, and consequently the Divisional Forest Officers had, much beyond their will, to keep a man in one place however untrustworthy or incompetent he might be.

88. Such was the state of things I found on taking over charge of the Sind Circle on 29th October 1894, and as the evils of the "Departmental" system were brought to my notice one by one, I took the necessary steps to remedy them.

89. In the Sukkur Division, the extraction and delivery of the fuel from specified compartments to the North-Western Railway and other public bodies were effected through the agency of contractors, but in the two central divisions, Hyderabad and Naushahro, the forests continued to be worked on the "Departmental" system for the simple reason that I was not able to find contractors to undertake the felling as well as delivering operations so late in the season. But the unlimited powers of making advances to Range Forest Officers were, it need not be said, largely restricted, as well as all existing orders that were in contravention of the Forest Department Code cancelled. In the working of the forests of the Jerruck Division, important modifications were carried out just before my arrival which it was not deemed necessary to disturb. As a rule, departmental agency only was employed for felling timber and firewood as well as for manufacturing charcoal, and the transport and subsequent delivery to most of the public departments or to the timber markets were left to contractors to carry out who bore all the expenses in connection therewith. The object of this arrangement was twofold. Firstly, only a portion of the working charges were debited against the Department, and thereby reduced the percentage of expenditure over receipts; and secondly, the material having been sold and made over to the contractors in the forests, there was no further risk.

(f) *Exploitation of Minor Forest Produce.*

(1) *Extraction of Fodder.*

90. The extraction of fodder is quite an insignificant feature in the working of the forests of the Sind Circle.
Extraction of fodder. Villagers are generally allowed to remove grass from the open forests free of charge when they require it for stall feeding their animals.

(2) *Grazing.*

91. In all open forests, grazing is allowed on payment of fees, which are collected by Forest subordinates. The scale of fees laid down under the authority of Government Resolution No. 7277 of 13th October 1886, and which is now strictly enforced, is as under:—

Kind of Animal.	PER MONTH.					
	Maximum scale or 1st class fee.	2nd class fee.		Minimum scale or 3rd class fee.		
		Rs.	a. p.	Rs.	a. p.	Rs.
Camel	0 4 0	0	4	0		0 4 0
Buffalo	0 3 0	0	1	6		0 1 0
Horse	0 1 6	0	0	9		0 0 3
Cow or bullock	0 1 6	0	0	9		0 0 3
Donkey	0 1 0	0	0	6		0 0 3
Goat	0 0 3	0	0	3		0 0 3
Sheep	0 0 3	0	0	2		0 0 1

92. Pasture was fairly abundant within as well as outside forest limits during the year owing to an abnormally high flood having traversed the flat country and heavy rainfall having fallen in the hills. The banking up of the river by the erection of "protective bunds," it was noticed, had completely destroyed the grass and other surface growth in a few forests.

93. A comparison is made in the following statement of the number of

Number of animals that grazed at full and animals licensed for grazing at full and privileged rates. privileged rates during the years 1893-94 and 1894-95 :—

Division.	No. OF ANIMALS.		AMOUNT OF FEES COLLECTED.	
	1893-94.	1894-95.	1893-94.	1894-95.
Sukkur	169,119	192,698	15,682	17,963
Naushahro	122,360	104,937	8,867	8,354
Hyderabad	141,369	105,049	12,194	10,889
Jerruck	93,663	81,718	11,599	11,375
Total	526,511	484,402	48,342	48,581

94. It is an undeniable fact that, owing to collusion with forest subordinates, professional as well as non-professional graziers register about half the number of the animals they possess, and the loss to forest revenues resulting from this form of corruption is therefore considerable. Now that departmental agency for the extraction of timber and firewood is no more to be resorted to, both the controlling and executive staff will be able to exercise better supervision over their subordinates, and it would not be a matter of surprise if the revenue from this source rose 30 per cent. at least in the near future.

(3) Miscellaneous Produce.

95. The principal articles of minor produce in the forests of the Sind

Circle are palrás (pods of the *Acacia Arabica*) Removal of minor products. and lac, which is obtained from incrustations

on babul and kundee branches produced by the insect *Coccus Lacca*, which punctures the bark. The right to collect these as well as other less important minor products is sold annually by auction. Honey, wax, gum and "ber" fruit, kinra, &c., are allowed to be taken free of charge.

CHAPTER III.

GROSS YIELD AND OUTTURN OF FOREST PRODUCE.

I.—Departmental Operations.

(a) Timber.

96. The figures in the following statement show the outturn of large

Outturn of timber. and small timber resulting from departmental operations undertaken during the two years 1893-94 and 1894-95 :—

Year.	TIMBER IN ROUGH.		SAWN TIMBER.			
	Logs.	Poles.	Planks.	Bolsters.	Sleepers.	Slabs.
1893-94 ...	No.	No.	No.	No.	No.	No.
... ...	12,850	161,905	1	731	9,554	1,501
1894-95 ...	13,195	172,662	8,261	27	2,120	81
Increase ...	345	10,757	8,260
Decrease	704	7,434	1,420